

# INCREASED EFFICIENCY IN LIQUID AND GASEOUS PLANAR DEVICE COOLING TECHNOLOGY

## ABSTRACT

A two loop heat conversion system for high heat density planar devices in which high density heat in an area adjacent to a surface is transferred into a liquid cooling medium closed loop in a radiated heat to liquid heat transfer component positioned in contact with the surface that is connected, to a liquid to gas medium, heat exchanger in a first loop and a gas medium second loop is arranged to carry away all radiated heat from the assembly and all heat extracted from the liquid in the liquid to gas heat exchanger and exhaust it to the ambient. The radiated heat transfer component of the invention provides a transition in manufacturing that is practiced employing the planar type tools in fabrication which usually can neither be practiced manually or observed without substantial magnification.

卷之三